What is claimed is:

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- 1. An epoxy resin composition comprising an addition polymer **BC** of vinyl monomers **B**, which is polymerized in the presence of liquid epoxy resins **C**, and, if desired, further liquid epoxy resins **A**.
- 2. The epoxy resin composition as claimed in claim 1, wherein the liquid epoxy resins A and C are selected independently of one another from glycidyl esters of aliphatic monobasic or polybasic carboxylic acids and glycidyl ethers of aliphatic monohydric or polyhydric alcohols and phenols having a specific epoxide group content of from 0.5 to 10 mol/kg.
- The epoxy resin composition as claimed in claim 1, wherein the
 addition polymer BC is derived from vinyl monomers containing acid groups.
- The epoxy resin composition as claimed in claim 1, wherein the addition polymer BC is derived from monomers B1 selected from olefinically unsaturated carboxylic acids having from 3 to 10 carbon atoms.
- The epoxy resin composition as claimed in claim 4, wherein the addition polymer is derived from further vinyl monomers selected from monomers B2 without further functionality, hydroxy-functional monomers B3, and aromatic vinyl monomers B4.
 - 6. The epoxy resin composition as claimed in claim 1, having a viscosity, measured in accordance with DIN EN ISO 3219 at 23 °C and 100 s⁻¹, of from 1 000 to 10 000 mPa·s.
 - 7. The epoxy resin composition as claimed in claim 1, further comprising fillers selected from talc, calcined kaolins, silicates, chalk, dolomite,

graphite, mica, metal powders, glass fibers and ground glass, silica, especially highly disperse silica, and bentonites.

- 8. A process for preparing an epoxy resin composition as claimed in claim 1, which comprises preparing a polymer **BC** in the presence of a liquid epoxy resin **C** by radical polymerization of vinyl monomers **B** including acid-functional vinyl monomers **B1**.
- 9. The process as claimed in claim 8, wherein the polymer BC is mixedwith a liquid epoxy resin A.

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10. A method of use of an epoxy resin composition as claimed in claim 1 for coating painted or unpainted metals, comprising preparing an epoxy resin composition as claimed in claim 1 and applying the said epoxy resin composition to a painted or unpainted metal substrate.